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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,934	11/03/2003	Ikuo Takahashi	032044	5043

38834 7590 11/27/2006

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EXAMINER	
NUTTER, NATHAN M	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/698,934	TAKAHASHI ET AL.	
	Examiner	Art Unit	
	Nathan M. Nutter	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4 and 6-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4 and 6-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *09-06*.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

In response to the amendment filed 5 October 2006, the following is being placed in effect.

The rejection of claim 10 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is hereby expressly withdrawn.

The provisional rejection of claims 1, 3, 4 and 6-10 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 11/051,462 in view of Kaufhold et al (US 6,559,266), Kaufhold et al (US 6,527,995) or Prissok et al (US 5,900,439), is hereby expressly withdrawn.

The rejection of claims 1, 3, 4 and 6-10 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 11/172,904 in view of Kaufhold et al (US 6,559,266), Kaufhold et al (US 6,527,995) or Prissok et al (US 5,900,439), is hereby expressly withdrawn.

The rejection of claims 1, 3, 4 and 6-10 under 35 U.S.C. 103(a) as being unpatentable over Imamura et al (US 5,616,657), taken in view of Kaufhold et al (US 6,559,266), Kaufhold et al (US 6,527,995) or Prissok et al (US 5,900,439), is hereby expressly withdrawn.

The rejection of claims 1, 3, 4 and 6-10 under 35 U.S.C. 103(a) as being unpatentable over Ariga et al (US 6,803,443), taken in view of Kaufhold et al (US

6,559,266), Kaufhold et al (US 6,527,995) or Prissok et al (US 5,900,439), is hereby expressly withdrawn.

New grounds of rejection will follow.

Declaration

The Declaration of Iida of 5 October 2006 has been considered but is not deemed to be relevant to the new rejections set out below. The declaration concerns use of the additives with polyurethanes. The rejections below use the additives in polyesters.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 10 recites the process of "controlling a biodegradation rate of an aliphatic polyester" "wherein said biodegradation rate is controlled by altering proportions of said aliphatic polyester (A), said carbodiimide compound (B) and said at least one compound

(C) selected from the group consisting of benzotriazole-, triazine- and hydroxylamine-based compounds." Nothing in the Specification teaches the step of "altering proportions" of each of (A), (B) and (C), as claimed. Applicants' attention is drawn to paragraphs [0085] wherein the amount of carbodiimide may be manipulated and paragraph [0101] wherein the amount of component (C) may be manipulated, but these values are always in reference to 100 wt. parts of polyester resin. No manipulation of wt. parts of the polyester is disclosed.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3, 4 and 6-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of copending

Application No. 11/051,462 in view of Murschall et al (US 6,855,758) or Murschall et al (US 2003/0091843). The copending application teaches the manufacture of a biodegradable plastic composition that at paragraphs [0044] to [0049] employs a carbodiimide and at paragraph [0126] may employ UV absorbing agents.

The reference to Murschall et al (US 6,855,758), previously cited, shows the combination for inclusion in polyesters at column 3 (lines 39-54) for the carbodiimides and column 7 (lines 10 et seq.) for the UV stabilizers, including benzotriazoles. The reference teaches clearly that the "use of UV stabilizers in combination with hydrolysis stabilizers leads to useful films with excellent properties" at column 7 (lines 57-60).

The reference to Murschall et al (US 2003/0091843), previously cited, shows the conjunctive use of the carbodiimides with a benzotriazole UV stabilizer for inclusion in polyesters at paragraphs [0017], [0019], [0053]-[0058]. Again, this reference shows the "use of UV stabilizers in combination with hydrolysis stabilizers leads to useful films with excellent properties" at paragraph [0053].

The employment of the two recited additives is deemed to be conventional to those having an ordinary skill in the art, and subsequent use in the composition of the copending application, on the suggestion thereof in said copending application, would have been obvious.

This is a provisional obviousness-type double patenting rejection.

Claims 1, 3, 4 and 6-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of

copending Application No. 11/172,904 in view of Murschall et al (US 6,855,758), or Murschall et al (US 2003/0091843). The copending application teaches the manufacture of a biodegradable plastic composition that in claims 1-13 employs a carbodiimide and at paragraph [0059] may employ UV absorbing agents.

The reference to Murschall et al (US 6,855,758), previously cited, shows the combination for inclusion in polyesters at column 3 (lines 39-54) for the carbodiimides and column 7 (lines 10 et seq.) for the UV stabilizers, including benzotriazoles. The reference teaches clearly that the "use of UV stabilizers in combination with hydrolysis stabilizers leads to useful films with excellent properties" at column 7 (lines 57-60).

The reference to Murschall et al (US 2003/0091843), previously cited, shows the conjunctive use of the carbodiimides with a benzotriazole UV stabilizer for inclusion in polyesters at paragraphs [0017], [0019], [0053]-[0058]. Again, this reference shows the "use of UV stabilizers in combination with hydrolysis stabilizers leads to useful films with excellent properties" at paragraph [0053].

The employment of the two recited additives is deemed to be conventional to those having an ordinary skill in the art, and subsequent use in the composition of the copending application, on the suggestion thereof in said copending application, would have been obvious.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura et al (US 5,616,657) taken in view of Murschall et al (US 6,855,758) or Murschall et al (US 2003/0091843).

The reference to Imamura et al shows the aliphatic polyester at column 6 (lines 43-50). The reference teaches throughout the production of the polyester from aliphatic components. Note the many Examples. Further, note column 19 (lines 29-38) for the inclusion of ultraviolet inhibitors, including benzotriazoles and a stabilizer, including carbodiimides.

The reference to Murschall et al (US 6,855,758), previously cited, shows the combination for inclusion in polyesters at column 3 (lines 39-54) for the carbodiimides and column 7 (lines 10 et seq.) for the UV stabilizers, including benzotriazoles. The reference teaches clearly that the "use of UV stabilizers in combination with hydrolysis stabilizers leads to useful films with excellent properties" at column 7 (lines 57-60).

The reference to Murschall et al (US 2003/0091843), previously cited, shows the conjunctive use of the carbodiimides with a benzotriazole UV stabilizer for inclusion in polyesters at paragraphs [0017], [0019], [0053]-[0058]. Again, this reference shows the

"use of UV stabilizers in combination with hydrolysis stabilizers leads to useful films with excellent properties" at paragraph [0053].

The employment of the two recited additives is deemed to be conventional to those having an ordinary skill in the art, and subsequent use in the composition of Imamura et al, on the suggestion thereof would have been obvious to an artisan of ordinary skill.

Claims 1, 3, 4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ariga et al (US 6,803,443) taken in view of Murschall et al (US 6,855,758) or Murschall et al (US 2003/0091843).

The reference to Ariga et al shows the aliphatic polyester at column 2 (line 51) to column 3 (line 9), column 4 (lines 14 et seq.) and the many Examples. The reference teaches throughout the production of the polyester from aliphatic components. Further, note column 14 (lines 21-37) for the inclusion of benzotriazole-based ultraviolet inhibitors, and a stabilizer, including carbodiimides.

The reference to Murschall et al (US 6,855,758), previously cited, shows the combination for inclusion in polyesters at column 3 (lines 39-54) for the carbodiimides and column 7 (lines 10 et seq.) for the UV stabilizers, including benzotriazoles. The reference teaches clearly that the "use of UV stabilizers in combination with hydrolysis stabilizers leads to useful films with excellent properties" at column 7 (lines 57-60).

The reference to Murschall et al (US 2003/0091843), previously cited, shows the conjunctive use of the carbodiimides with a benzotriazole UV stabilizer for inclusion in

polyesters at paragraphs [0017], [0019], [0053]-[0058]. Again, this reference shows the "use of UV stabilizers in combination with hydrolysis stabilizers leads to useful films with excellent properties" at paragraph [0053].

The employment of the two recited additives is deemed to be conventional to those having an ordinary skill in the art, and subsequent use in the composition of Ariga et al, on the suggestion thereof, would have been obvious to an artisan of ordinary skill.

Response to Arguments

Applicant's arguments with respect to claims 1, 3, 4 and 6-10 have been considered but are moot in view of the new grounds of rejection.

Due to the new grounds of rejection, this action is not being made FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathan M. Nutter
Primary Examiner
Art Unit 1711

nmn

19 November 2006